

Bilateral Cemented Bipolar Hemiarthroplasty via Direct Anterior Approach in Bilateral Neck of Femur Fractures: A Case Report

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INTRODUCTION:

Bipolar hemiarthroplasty stands as a surgical treatment of choice for addressing neck of femur fractures in the elderly¹. The direct anterior approach (DAA) has become preferred surgical option due to its ability to preserve hip abductors and short external rotators, thereby reducing the risk of post-operative dislocation². We present our experience in dealing with bilateral neck of femur fractures that were treated with bilateral bipolar hemiarthroplasty via DAA.

REPORT:

A 73 year-old healthy gentleman was diagnosed with bilateral neck of femur fractures and 1st left metacarpal bone fracture following a motor vehicle accident. He subsequently underwent bilateral cemented bipolar hemiarthroplasty.

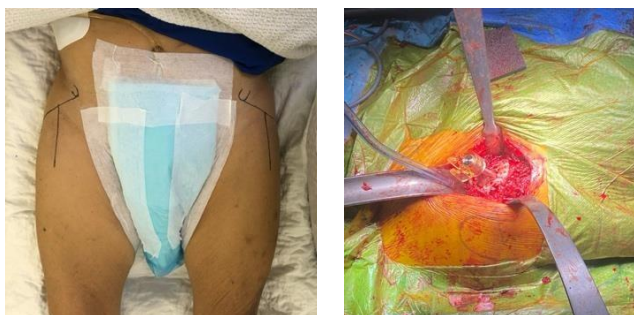


Figure 1: Patient position, skin marking and delivering of the proximal femur.

Patient was positioned in supine on a standard operating table. Surface landmark identified using ASIS and tip of GT. Left hip procedure was a bit challenging as there is an avulsion fracture of the lesser trochanter. The bilateral proximal femur were adequately delivered via a figure of 4 position. Femoral canal preparation and cementation was done without difficulty. The left lesser trochanter was fixed with screw fixation in via same exposure. Intra-operatively, we able to use image intensifier to check implant

placement and limb length assessment can be checked accurately. Post surgery, patient is able to sit by the edge of the bed by day three and able to walk with walking frame by day five. At two weeks post surgery, he was ambulating well with walking frame.



Figure 2: Plain radiograph post surgery.

CONCLUSION:

DAA is doable in a patient with bilateral neck of femur fracture as it is relatively requiring less time for repositioning, provide adequate exposure and patient can achieve early post-operative full weight bearing ambulation and rehabilitation.

REFERENCES:

1. Langslet et al.(2014)."Cemented versus uncemented hemiarthroplasty for displaced femoral neck fractures: 5-year follow-up of a randomized trial. "Clin Orthop Relat Res,472(4),1291-9.doi:10.1007/s11999-013-3308-9
2. Realyvasquez et al.(2022)."The direct anterior approach to the hip:a useful tool in experienced hands or just another approach?."Arthroplasty(London,England),4(11),2.doi:10.1186/s42836-02100104-5.